



ANNUAL REPORT
OF THE
MEDICAL OFFICER OF HEALTH
OF
St. Albans Urban Sanitary District,
THE
St. Albans Rural Sanitary District,
AND
THE SISTERS' HOSPITAL,
FOR THE YEAR 1896,
BY
JOHN MORISON,
M.D., D.P.H., F.G.S.,
Medical Officer of Health,
etc., etc.

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METEOROLOGY.

The mean temperature of the year 1896 was 49.6° , which is considerably above the average of recent years. The highest recorded temperature was on July 14th, when 84.3° was reached. The lowest temperature was 20.9° on February 26th. The maximum was 2.7° above, and the minimum 10.8° above the maximum and minimum of 1895.

January was a warm month with a daily range of temperature under the average, a cloudy sky, and a small rainfall on a small number of days. The mean temperature was 39.6° . The minimum was 26.7° on the 27th. The maximum was 51.2° on the 23rd. The rainfall (rain or snow) was 0.79 inch on 11 days. The maximum rainfall was 0.26 inch on the 24th.

February was also a warm month, with a considerable daily range of temperature, a moderately cloudy sky, and a small rainfall on a small number of days. The mean temperature was 38.7° . The minimum was 20.9° on the 26th. The maximum was 56.7° on the 12th. The rainfall (rain or snow) was 0.46 inch on 9 days. The maximum rainfall was 0.13 on the 20th.

March was a warm month with a moderate daily range, a very large rainfall on a very large number of days, and a cloudy sky. The mean temperature was 44.5° . The minimum was 29.5° on the 15th. The maximum was 63.3° on the 24th. The rainfall was 3.62 inches on 26 days. The maximum rainfall was 0.66 inch on the 20th.

April was a warm month with a small rainfall on an average number of days; a moderate daily range of temperature and an average amount of clouds. The mean temperature was 47.9° . The minimum was 32° on the 24th. The maximum was 64.8° on the 27th. The rainfall was 0.87 inch on 12 days. The maximum rainfall was 0.26 inch on the 10th.

May was a warm month with a large daily range of temperature, a very bright sky and a very small rainfall on

a small number of days. The mean temperature was 52.9° . The minimum was 34° on the 2nd. The maximum was 75.1° on the 12th. The rainfall was 0.34 inch on 5 days. The maximum rainfall was 0.20 inch on the 21st.

June was a very warm month with a large daily range of temperature, a very bright sky, and a moderate rainfall on an average number of days. The mean temperature was 61.7° . The minimum was 37.7° on the 1st. The maximum was 81.1° on the 15th. The rainfall was 1.60 inches on 10 days. The maximum rainfall was 0.48 inch on the 10th.

July was also a very warm month with a large daily range of temperature, a very bright sky, and a small rainfall on a small number of days. The mean temperature was 63.0° . The minimum was 45.3° on the 29th. The maximum was 80° on the 14th. The rainfall was 0.90 inch on 9 days. The maximum rainfall was 0.60 inch on the 26th.

August was a cold month with a small daily range of temperature, an average amount of clouds, and an average rainfall on a considerable number of days. The mean temperature was 58.2° . The minimum was 43.8° on the 27th. The maximum was 72.7° on the 13th. The rainfall was 2.42 inches on 16 days. The maximum rainfall was 1.08 inches on the 13th.

September was a cold month with a small daily range of temperature, a cloudy sky, and an exceedingly large rainfall on a very large number of days. The mean temperature was 55.7° . The minimum was 38.3° on the 21st. The maximum was 68.9° on the 8th. The rainfall was 6.69 inches on 24 days. The maximum rainfall was 1.01 inches on the 24th.

October was a cold month with an average daily range of temperature, an average amount of cloud, and a large rainfall on a large number of days. The mean temperature was 44.8° . The minimum was 27.9° on the 28th. The maximum was 61.5° on the 3rd. The rainfall was 3.46 inches on 21 days. The maximum rainfall was 0.95 inch on the 6th.

November was a cold month with a small daily range of temperature, an average amount of cloud, and a small rainfall on a small number of days. The mean temperature was 38.7° . The minimum was 25.3° on the 30th.

The maximum was 48.9° on the 21st. The rainfall (rain or snow) was 1.49 inches on 11 days. The maximum rainfall was 0.44 inch on the 7th.

December was slightly over the average temperature, with a small daily range, an average amount of cloud and a large rainfall on a large number of days. The mean temperature was 37.9° . The minimum was 24.5° on the 24th. The maximum was 50.7° on the 26th. The rainfall (rain or snow) was 4.16 inches on 24 days. The maximum rainfall was 0.75 on the 4th.

The First Quarter of the year was unusually warm, with a rainfall about the average on an average number of days. The most noticeable peculiarity of this quarter was the cloudy and very rainy weather experienced in March.

The Second Quarter was unusually warm and bright throughout with a small rainfall on a small number of days.

The Third Quarter was cold and cloudy, with a very large rainfall on a large number of days. The chief feature of this quarter was the excessive amount of rain in September.

The Fourth Quarter was cold on the whole, with a rainfall over the average on about an average number of days.

On the whole the year was in temperature considerably above the average, with a warm winter spring and early summer, and a cold later summer and autumn. The rainfall, 26.80 inches, was about the average.

The first half of the year was very dry, and the second half very wet having nearly three times the rainfall of the first part of the year.

By far the wettest month was September when a most unusual amount (nearly 7 inches) of rain fell, but March and December were also very wet months. The driest month was May, but January, February, and April were also exceedingly dry.



R E P O R T
 OF THE
MEDICAL OFFICER OF HEALTH,
St. Albans City,
FOR THE YEAR 1896.

TO THE MAYOR AND CORPORATION OF THE CITY OF
 ST. ALBANS.

GENTLEMEN,

I beg to report that during the year 1896 there were 194 deaths within the City of St. Alban. Of these deaths 56 were in the parish of St. Alban, 81 in St. Peter's parish, 16 in St. Michael's, 3 in Sandridge, 2 in the General Hospital, 3 in the Sisters' Hospital, and 33 in the Union Workhouse. Of the deaths recorded 93 were of males and 101 of females.

Taking the population of the City as estimated up to the middle of 1896 to be 14,055, this would give us a death-rate of 13·8, per annum. We have to bear in mind however, that of the 33 deaths which occurred in the Workhouse there were 22 of persons who did not belong to our City, and that 1 of the 3 deaths in the Sisters' Hospital was that of a child from the Rural District. In addition to this, a man unknown evidently a stranger was found drowned in the River Ver. Deducting therefore these 24 cases, we get 170 as the corrected number of deaths, and 12·1 as the true death-rate. In 1895 the total death-rate was 14·6, and the corrected rate 13·6, so that 1896 shows a very marked improvement. Indeed the death-rate for the year just elapsed is lower than it has been for a great many years past; the average corrected death-rate for the previous 6 years was 15·4, so that our death-rate is 3·3 under the average. In spite of somewhat unfavourable conditions we have been remark-

ably healthy during the past year, and we have every reason to congratulate ourselves on the very satisfactory position which we occupy, as compared with most similar towns throughout the country.

Of the total deaths 36 were of children under 1 year of age, giving us a death-rate of 2·5 for infants, as against 3·5 for the previous year. Amongst children between 1 and 5 there were 20 deaths, and 66 amongst persons of 65 years old and upwards.

There were 22 deaths from various Zymotic diseases, viz., 6 from Scarlet Fever, 4 from Diphtheria, 5 from Measles, 3 from Whooping Cough, 1 from Enteric Fever, 2 from Diarrhœa, and 1 from Influenza, giving us a Zymotic death-rate of 1·5, as against 1·2 in 1895. There were 24 deaths from diseases of the Respiratory System, as against 41 in the previous year; 28 from diseases of the Heart and Great Blood-vessels, as against 25; and 21 from diseases of the Nervous System, as against 25 in 1895. There were 13 deaths from Phthisis and 6 from other Tubercular maladies, as against 23 and 9 respectively for the previous year, giving us a death-rate for Phthisis of 1, and for Tubercle of 1·3. There were 10 deaths from Cancer. There were 67 deaths from various other diseases. The number of deaths from Respiratory and Nervous diseases and from Phthisis was considerably under the average; and from diseases of the Heart slightly above the average.

There was a considerable decrease in the number of deaths amongst children under 1 year of age. This is to be accounted for by the extremely mild weather experienced both in the beginning and close of the year, which lessened very considerably the prevalence of diseases of the Lungs, always very fatal to young children. The deaths amongst children between 1 and 5 are somewhat over the average, owing mainly to the deaths from Scarlet Fever and Measles. There is a slight decrease in the number of deaths amongst young and middle-aged people, and also a decrease in the mortality of persons of 65 years and upwards.

There were during the year 3 deaths from Accident or Violence, all of males, and all 3 being cases of suicide—one was of a man, aged 40, who committed suicide by taking oxalic-acid; another of a man about 30,

who drowned himself in the River Ver; and a third of a man of 58 years of age, who committed suicide by hanging himself.

During the year there were 6 Inquests held—one on a female of 75, who died of “Heart Disease”; one on a woman of 33, who died from “Excessive Hæmorrhage during Child-birth”; a third on a woman aged 52, who died of “Failure of the Heart”; and three on the cases of death from Accident or Violence mentioned above.

There were 6 uncertified deaths—one of a woman of 64, who is stated to have died of “Senile Decay”; another of a woman of 88, who is also said to have died from “Senile Decay”; a woman of 70, who seems to have died from “Heart Disease”; a woman of 60 years old, who is stated to have died of “Syncope after Diarrhœa”; and two male infants of 15 hours and 12 months respectively, who are reported as having died of Convulsions.

The death-rate in the different divisions of the City was as follows:

St. Alban's Parish	12'1.
St. Peter's ,, ...	11'2.
St. Michael's ,, ...	8'6.
Sandridge ,, ...	7'5.

During the past year there have been 346 births, 182 of males and 164 of females.

There were 118 births in the parish of St. Albans; 165 in St. Peter's parish; 45 in St. Michael's; 10 in Sandridge; 1 in the Prison; and 6 in the Union Workhouse. Of these births 12 were illegitimate, and the proportion of illegitimate to legitimate births was therefore 34'6 per thousand.

The birth-rate for the year was 24'6.

The birth-rates for the different parishes were as follows:

St. Alban's Parish	27'8.
St. Peter's ,, ...	22'6.
St. Michael's, ,, ...	24'3.
Sandridge ,, ...	25'0.

The rate of mortality amongst children under 1 year of age per 1,000 registered births was 103, being rather lower than it was in 1895.

Under the Infectious Diseases (Notification) Act 176 cases of Infectious diseases have been notified to me,

viz., 152 of Scarlet Fever, 8 of Diphtheria, 15 of Erysipelas, and 1 of Enteric Fever, the latter being a case imported from the Rural District.

In the months of January, February, and March, a number of cases of Scarlet Fever occurred amongst us. They were nearly all promptly removed to the Sisters' Hospital, and by April the outbreak appeared to be at an end. No cases occurred in the City in April, May, June, and the first half of July, excepting one of the servants at the Sisters' Hospital. During all these months, however, there were a number of cases of Scarlet Fever in Harpenden and Wheathampstead. In July the disease spread to Sandridge, and several cases occurred in Sandridge New Town in Boundary Road, just outside the City boundary. In July 1 case occurred within the City, and 6 in August. In September, spite of all we could do, the disease rapidly spread, and by October it was evident that we were in presence of a serious epidemic. About the middle of October, owing to the number of cases which had occurred in Watson's Row, I thought it desirable to exclude all children residing in that neighbourhood from school for a fortnight ; and in the beginning of November, as a large proportion of the cases occurring were resident in Sopwell Lane and Albert Street, I deemed it wise to prohibit all children from these localities from attending school for a similar length of time. For the same reason, and owing also to the fact that this prohibition would very materially reduce the number of children attending the St. Peter's School for Girls in the Old London Road, I considered it my duty to recommend the closure of that School for a fortnight. This was accordingly done. These measures seemed to have some effect in lessening the number of fresh cases, but the epidemic was too well established, and affected too many parts of the City to render it possible to do more than alleviate its severity. I was exceedingly loth to interfere with primary education by closing all the Public Elementary Schools, and indeed I did not consider that such a measure would be likely to attain the object aimed at, as in many cases the disease did not appear to be spread by the agency of the Schools. On several occasions I inspected the children attending the various Public Elementary Schools in the city, and detected several cases of Scarlet Fever in the peeling stage

which had escaped notification. None of these cases had been attended by any medical man. In one case, as a public example, it was deemed desirable to prosecute the parent for non-notification, and the mother was accordingly summoned before the magistrates and fined. By the middle of December there was a reduction in the number of fresh cases, and by the end of the month, the number was considerably lessened. We may now consider the epidemic practically at an end. In January, February, and March, there were 24 cases, in April, May, and June, 1 case, in July, 1 case, in August, 6 cases, in September, 10 cases, in October, 50 cases, in November, 32 cases, and in December, 28 cases. Altogether there were 54 cases in St. Albans parish, 78 in St. Peter's, 12 in St. Michael's, 1 in St. Stephen's, and 1 in Sandridge.

There were 6 deaths from this cause, 2 in St. Albans parish, 1 in St. Michael's, and 3 in the Sisters' Hospital, during the months of September, October, and November. The percentage of fatal cases amongst the patients treated in the Sister's Hospital was 2.06; while among those treated in their own homes it was 4.8, more than twice as great. One of the cases, which died in the Sisters' Hospital, was received from the Workhouse, and was dying when admitted, and the other two when admitted were in an almost hopeless condition. I may mention that several other cases treated during the year would unquestionably have died had they remained at their own homes. We see, therefore, that a Hospital for Infectious Diseases is of very great benefit to the community, not only by isolating the cases and so preventing the spread of infection, but also by the provision of proper accommodation, suitable food, skilled nursing, and conditions where medical treatment can be efficiently carried out, thereby saving many lives which otherwise would have been sacrificed.

There were 8 sporadic cases of Diphtheria notified from different parts of the town in the months of February, April, May, August, September, and October. They were not associated with any special insanitary conditions and the disease did not show any tendency to spread. 4 deaths occurred from this cause, 2 in St. Albans, 1 in St. Peter's, and 1 in Sandridge, in February, April, May, and September.

The case of Enteric Fever which occurred, and which proved fatal in January, was brought into the Workhouse from the Rural District.

There were a certain number of cases of Influenza throughout the year, but at no time did it approach the proportions of an epidemic. One death occurring in April in St. Albans parish is attributed to this cause.

An epidemic of Measles visited us in the Spring, but it was of no very great severity, and lasted a comparatively short time, although pretty generally spread over the town. This disease however was responsible for 5 deaths, 3 in St. Albans parish, and 2 in St. Peter's, all occurring in April.

A good many cases of Whooping Cough occurred in the Spring, and in the latter part of the year we were visited by a severe and widely diffused epidemic of this disease. It has been spread all over the town, and a large proportion of our young children have suffered from it. 3 deaths are attributed to this cause, occurring in May, October, and November, 2 in St. Peter's and 1 in St. Michael's

I should not consider that I was doing my duty if I did not urge upon you once again to include Measles and Whooping Cough in the list of notifiable diseases. There is so much that Health Officers can do in the way of prevention and checking the spread of these maladies did we but know of the first cases. No doubt it would cost a certain amount of money, but the money would be laid out to very great advantage. Not only would a number of lives be saved which now are sacrificed, but a vast amount of illness and suffering would be spared to our children, and a very considerable sum in the way of expense would undoubtedly be saved to their parents. So that even from a business point of view I think it would pay us to have Measles and Whooping Cough made notifiable.

I should be much obliged if my professional brethren of St. Albans would send me the notifications as soon as their diagnosis is made, and it would be a great assistance to me if they would kindly put in the ages of the patients.

I am exceedingly sorry that the Rural District Council has given notice to terminate the agreement with the Urban Authority in the matter of the Sisters' Hospital. I trust that a *modus vivendi* may yet be found, as I feel certain it would be a great advantage to both districts, not only on the ground of economy, but for other reasons, to continue in partnership together.

I cannot leave the subject of Infectious Diseases without expressing my earnest hope that it will be found possible before long to remove the Small-pox Hospital from the site where it now stands, to some more suitable situation. Should I have to treat patients there under present circumstances, it would not be without considerable misgivings. The proper locality for a Small-pox Hospital would be a mile or two away from the town, and far removed from any other buildings. I hope that in the near future, perhaps in conjunction with the Rural District Council, it may be possible to secure such a situation.

Owing to the great amount of Infectious Disease during the year 1896, and to the fact that we possess no disinfecting apparatus, it has been necessary to order the destruction of a large quantity of infected clothing and bedding. For this we have had to pay a large sum during the past two or three years as compensation, an amount which would go a long way towards paying for a Disinfector.

I would urge the Council most strongly to lose no more time in providing an efficient Disinfector at the Sisters' Hospital. The only reliable mode of disinfecting woollen clothing, bedding, etc., is by means of steam. And I would recommend you to erect a Washington Lyons or other Steam Disinfector at the Sisters' Hospital on as early a date as possible.

In September I inspected some Cottages in Christopher Yard, which were in a very bad condition. I certified that they were unfit for human habitation, as being in a state of extremely bad repair, incurably damp, and without any proper provision for through ventilation. The Council, however, against my advice, decided not to apply for a closing order, but directed the owner to execute certain repairs and alterations.

In the month of November I made an inspection of the Gas Works, in consequence of some complaints which were made to the Council of some offensive smells proceeding from them. After careful investigation and enquiry, I am bound to say that every care appears to be taken to minimise the nuisance arising from any sulphurous or other evil smelling exhalations given off in the various processes through which the gas passes in its purification, or from the various resulting products.

The water supplied to us by the Water Works Company

throughout the past year has been pure and wholesome, as well as sufficient in quantity. It is greatly to be desired however in the interests of all our citizens, that the Water Company would adopt some efficient means of softening the water supplied to us. Not only should we save considerably in the matter of soap, while our boilers and hot water pipes would not require to be cleaned out and renewed so often, but we should gain immensely in comfort, and would not be exposed to the risk of explosion, which unless carefully watched, the furring of the pipes connected with our kitchen ranges exposes us to. It is to my mind a source of very considerable regret that the Municipality of St. Albans has not thought fit in the past to take both Gas Works and Water Works under its own management and control.

The drainage of the City is carried out in a thorough and efficient manner. In connection with this subject I would most earnestly warn you not to close the manholes or trust for ventilation of the sewers to shafts alone.

Some little time ago it became evident, owing to our increasing population, that the land available at the Sewage Farm was no longer sufficient to adequately purify our sewage by means of intermittent downward filtration. This subject engaged the serious consideration of the Council for some time, and it was evident that it would be necessary either to purchase a considerable additional quantity of land or to adopt some system of precipitation in addition to the intermittent downward filtration. The subject was duly considered in all its bearings and it was decided to adopt a system of precipitation, and provide suitable buildings and tanks for the purpose. The consent of the Local Government Board has been obtained, and the buildings are in course of erection. I trust the result will be successful.

I must say, however, that I should have much preferred the purchase of an additional piece of land, could that have been obtained on reasonable terms.

I have inspected the various bake-houses throughout the City, and found everything satisfactory.

I have visited all the slaughter-houses in the City, and found them on the whole in as satisfactory a condition as their structure and situation would allow. I must call attention to the fact that in two instances I found a dog on the premises in contravention of the bye-laws.

In several instances the slaughter-houses are in populous neighbourhoods, and exceedingly close to dwelling houses. In such situations their presence must always give more or less annoyance to the neighbours, and if the very greatest care be not taken, they become an intolerable nuisance. It is a question which merits our serious consideration, whether the time has not nearly come when a public Abattoir will be a necessity for St. Albans.

I would call the attention of the Council to the nearly universal disregard of the bye-law which renders it obligatory on every householder to clear away the snow in front of his premises. It is most important for the comfort and safety of the community that this should be done.

I have inspected the markets on several occasions throughout the year, and found everything satisfactory.

I have systematically visited the various parts of the City, but found nothing to call for special comment.

I should like to say however that I consider it very desirable that ashes and refuse should be removed from every house certainly not less often than twice a week, though what I should really like to see initiated would be a system of daily scavenging.

I beg to thank the Mayor and the members of the Corporation for the courtesy and consideration which they have shewn me during the past year.

My thanks are also due to the Inspector of Nuisances and all the other City Officials for their valuable assistance and willing co-operation.

I am, Gentlemen,

Your most obedient Servant,

JOHN MORISON,

M.D. Edin., D.P.H. Cantab.,

Feb. 2nd, 1897.

Medical Officer of Health.

R E P O R T
OF THE
MEDICAL OFFICER OF HEALTH
OF THE
St. Albans Rural Sanitary District
FOR THE YEAR 1896.

TO THE CHAIRMAN AND MEMBERS OF THE ST. ALBANS
RURAL DISTRICT COUNCIL.

GENTLEMEN,

During the year 1896 there were 170 deaths in the St. Albans Rural Sanitary District—87 of males and 83 of females. There were 28 deaths in St. Peter's parish, 14 in St. Stephen's, 6 in St. Michael's, 13 in Sandridge, 44 in Harpenden, 34 in Wheathampstead, and 31 in Redbourn. The number of deaths in St. Peter's and Wheathampstead was somewhat over the average of the last 6 years, in Sandridge slightly over the average, in St. Stephen's St. Michael's and Harpenden considerably under, and in Redbourn slightly below the average.

Taking the district as a whole the mortality was somewhat below the average of the last 6 years. Taking the population of the district as estimated up to the middle of 1896 to be 14,991, this would give us a death-rate of 11·3 as against 12·6 for 1895.

But in order to get the true death-rate we must add to 170, 14 deaths of persons belonging to this district which occurred in the Union Workhouse at St. Albans, and 1 in the Sisters' Hospital. This gives us 185 as the corrected number of deaths, and 12·3 as the true death-rate.

In 1895 the true death-rate was 13·2. The average uncorrected death-rate for the last 6 years was 13, and the average true death-rate 13·8, so that 1896 may be looked upon as on the whole a very healthy year.

Of the total deaths, 39 were of children under 1 year of age, giving us a death-rate for infants of 2·6, as against 3·1 for 1895; 13 were of children between 1 and 5, and 60 of persons of 65 years old and upwards.

As compared with last year there is a decrease in the number of deaths amongst young children and aged people, and a slight diminution in the deaths of persons of middle age. On the other hand there is an increase in the number of deaths amongst young people; but this increase is principally due to the deaths from Enteric Fever, a certain number of cases of this disease having occurred both in Harpenden and Wheathampstead.

There were 23 deaths from diseases of the Nervous System, as against 26 in 1895; 25 from diseases of the Heart, as against 16; 40 from diseases of the Lungs, as against 25; 6 from Phthisis, as against 14; 1 from other Tubercular diseases, as against 5; 13 from Cancer, as against 8; 18 deaths from Zymotic diseases, as against 24 (9 deaths from Influenza being included in this number); 2 deaths from Injuries or Violence, as against 8; and 42 deaths from various other diseases.

Comparing the causes of death registered in 1895 and 1896, we find an increase in the number of deaths attributed to diseases of the Heart and of the Lungs and Cancer, while there is a decrease in the deaths attributable to diseases of the Nervous System, to Phthisis and Tubercle, and to Zymotic diseases.

The death-rate from Phthisis was 0·4, as against 0·95 in 1895; from Tubercle 0·47, as against 1·2.

The 18 deaths from various Zymotic diseases were made up as follows: 3 from Enteric Fever, 3 from Scarlet Fever, 1 from Diphtheria, 1 from Puerperal Fever, 1 from Measles, 4 from Whooping Cough, and 5 from Diarrhoea. The Zymotic death-rate was therefore 1·2, as against 1·6 in 1895.

The first quarter of the year as usual was the most unhealthy, and in the last quarter the mortality was slightly the lowest. The mortality was greatest in the months of February, December, and August, in which there were 21, 20, and 18 deaths, and lowest in October, September, May, July, and November, in which there were 7, 10, 11, 11, and 11 deaths respectively.

Our mortality returns would have been even more

favourable than they are had it not been for the prevalence of Scarlet and Enteric Fever in various parts of the district.

The death-rate in the various parishes was as follows :—

St. Peter's.....	13·8
St. Stephen's	7·09
St. Michael's... ..	6·7
Sandridge	10·6
Harpenden	9·8
Wheathampstead	13·9
Redbourn	15·5

There were 2 deaths from Accident or Violence during the year, one in Redbourn of a woman 30 years of age, a school-mistress, who was stated to have been “ feloniously run over and killed by a cart,” and the other in Wheathampstead, of a young woman who “ swallowed poison whilst in a state of delirium caused by Typhoid Fever.”

There were 4 Inquests during the year, one on a man of 52 years of age, who was stated to have died of “ Syncope.” Another on a male child of 3 years old who was said to have died of “ Convulsions following Bronchitis”; and the other 2 on the cases of death from Accident or Violence mentioned above.

There were three uncertified deaths : one, that of an man aged 77, who is said to have died of “ Senile Decay,” and the other two were of children of 1 day and 2 days old, respectively, one of whom is stated to have died of “ Premature Confinement”!! and the other of “ Immaturity or Congenital Feebleness.”

During the year there were 429 registered births, 207 of males, and 227 of females, and the birth rate was therefore 28·3.

Under the Infectious Diseases (Notification) Act 116 cases of Scarlet Fever, 33 cases of Enteric Fever, 2 of Diphtheria, 1 of Puerperal Fever, and 1 of Erysipelas, have been notified to me, 153 in all.

Of the Scarlet Fever cases, 16 occurred in Harpenden, 52 in Wheathampstead, 37 in Sandridge, 4 in St. Peter's, 4 in St. Michael's, and 3 in St. Stephen's. There was more or less Scarlet Fever in the district throughout the year, but it was not till April that it began to assume anything like an epidemic form.

In May, June, and July there were a certain number of

cases, but one could not call it an epidemic of a very serious character, till in August it reached its height, a number of cases being notified both in Sandridge and Wheathampstead. There was also every reason to believe that a number of slight cases occurred which were not seen by any medical man and were not notified. One parent was summoned before the Magistrates and fined for non-notification. A certain number of cases continued to occur in September and October, and in November and December the epidemic was evidently on the decline.

It began first in Wheathampstead, and thence spread to Harpenden and Sandridge, the rest of the district remaining almost totally free. Unfortunately very few of the first cases were taken into the Hospital, only one indeed out of the first ten cases notified in Wheathampstead, and as they were nearly all in cottages in close proximity to other houses no efficient isolation could be enforced, and the disease had every opportunity of spreading. There were 4 cases in January: 1 in Wheathampstead, 1 in St. Stephen's, and 2 in Sandridge. One of the Sandridge cases was taken to the Hospital, and the other was an infant and remained at home. In February there were 2 cases: 1 in Wheathampstead, and 1 in St. Stephen's, (the latter being removed to the Hospital). In March there were 4 cases, all in Wheathampstead, (1 of them being sent to the Hospital). There were ten cases in April: 9 in Wheathampstead, (2 of them admitted to the Hospital), and 1 in Harpenden, which was sent to the Hospital. In May there were 13 cases, 6 in Wheathampstead (all kept at their own homes), 6 in Harpenden (of whom 5 were taken to the Hospital), and 1 in St. Michael's. In June there were 11 cases, 6 in Wheathampstead, (4 of which went to Hospital), 3 in Harpenden (1 of them received into the Hospital), and 2 in St. Michael's. In July there were 8 cases, 3 in Wheathampstead (all sent to Hospital), 1 in Harpenden (kept at home), and 4 in Sandridge (all sent to Hospital). A great increase occurred in August, when there were 36 cases notified, 6 in Wheathampstead (1 sent to Hospital), 1 in Harpenden a case in a farm house (kept at home), 27 in Sandridge (14 sent to Hospital), and 2 in St. Peter's (1 sent to Hospital). In September there were only 5 cases, 3 in

Wheathampstead (1 sent to Hospital) and 2 in Sandridge (both sent to Hospital). In October the number of cases increased to 10, 7 in Wheathampstead (all of whom were sent to Hospital), 1 in St. Peter's (kept at home), and 2 in Harpenden (isolated at home in a good class private house. In November there were 6 cases, 2 in Wheathampstead (isolated in a good class farm house), 2 in Harpenden (both in good class houses), 1 in St. Michael's and 1 in St. Peter's (both taken to Hospital). There were 7 cases in December, 4 in Wheathampstead (3 of whom were sent to Hospital), 2 in Sandridge (both of whom were taken to Hospital), and 1 in St. Stephen's (which was also admitted to the Hospital). It was exceedingly fortunate that the most serious outbreak occurred during the Summer holidays, so that it was not found necessary to close the Public Elementary Schools. Altogether 57 cases were treated in the Hospital and 59 outside. Amongst the former there were no deaths, while of the latter 3 died, or about 5 per cent. I mention this to show you that the treatment of Scarlet Fever patients in an Isolation Hospital is a distinct advantage to the patients themselves, as well as a great gain to the community.

I am very sorry that you have decided to withdraw from the partnership with the St. Albans Urban Authority in the matter of the Sisters' Hospital. I very much fear that you will find the expense of building and maintaining a Hospital of your own very much greater than the present arrangement. I would fain hope that even now some equitable arrangement may be come to with the St. Albans City Council.

No less than 33 cases of Enteric Fever were notified to me in the past year. Of these 6 were sporadic cases occurring in January, February, and June, in Kensbourne Green, Shakspeare Road and Vaughan Road Harpenden, and in the Folly Wheathampstead, and in June and July in Bricket Wood, St. Stephen's. One of these latter patients was taken to the Infectious Hospital at Watford. In August there was an outbreak of Enteric Fever in the Bowling Alley district of Harpenden, and in that month 13 cases were notified. In September 4 cases were notified, in October 3, and in November 1. All these cases were in very poor houses where it was difficult to treat the

patients properly. The Sisters' Hospital was filled with cases of Scarlet Fever, and the Guardians refused to take cases of Enteric Fever into the Workhouse, although being nearly all practically paupers in my opinion the Union Infirmary would have been the best place for them ; and proper precautions being taken, there would have been no fear of the disease spreading to other inmates. Under these circumstances it was thought desirable to open a temporary hospital in Harpenden, where at least some of the more urgent cases could be treated. The Parish Room was opened for this purpose on August 17th, and it was finally closed on December 21st. Altogether 11 patients—2 men and 9 boys and children were treated there. There were no deaths amongst them. Besides these cases, 10 patients—2 men and 8 women, were treated at their own homes, and of these 2 died.

On investigation the back yards of most of these cottages were found to be saturated with filth, and the privies in a very foul condition. On analysis, the water of some of the wells was found contaminated by organic matter, and that of others was suspicious, though one could not feel perfectly certain that they were polluted.

It is a curious circumstance that of these 21 cases only 4 were men, the other 17 being women and children.

I should think it probable that in some way or other, probably through a mild case of fever which escaped observation, the Typhoid Bacillus found its way to the filth-saturated soil, where it found a suitable nidus to increase and multiply. Thence by soakage it found its way to some of the wells and contaminated the water.

The fact that most of the cases occurred in women and children is in favour of this view, as they would be more at home, and likely to drink more of the water than the men would.

The insanitary conditions have been rectified as far as possible, and orders have been obtained from the Magistrates to close some of the wells. It is, however, I think highly desirable that all the wells in this area should be closed, and a water supply for the district obtained from the Harpenden Water Works Company.

In the end of October and beginning of November, there was an outbreak of Enteric Fever in Wheathampstead. Altogether there were 6 cases—the first notified

on October 30th and the last on November 10th. Four of these cases occurred in one house, in which, on investigation, the sanitary conditions were found to be very bad. Two of these cases were fatal directly or indirectly, and I understand there has been a third death amongst them since the beginning of 1897. The insanitary conditions referred to have been rectified, and two of the wells, which were found on analysis to be polluted, have been closed.

The other cases of Enteric Fever, with the exception of 1 case at Bricket Wood, where the water was found on Analysis to be contaminated by organic matter, were not associated with any special insanitary conditions, and at least two of them seem to have been imported.

Three cases of Diphtheria were notified. One at Roestock, St. Peter's, and 1 in Sandridge New Town. (Two cases of Scarlet Fever were notified from the same house immediately afterwards, so that this case which proved fatal was probably in reality one of Scarlet Fever); another case of Diphtheria occurred in August at Tyttenhanger Green.

It is worthy of note that there was no case of Infectious Disease notified to me from the parish of Redbourn during the year 1896.

There was a certain amount of Measles in various parts of the district in the early part of the year, and one death occurred from this cause at Colney Heath St. Peter's parish in February.

A good deal of Whooping Cough occurred in various parts of the district in the Spring and again in the Autumn. Four deaths were due to this disease, one in March in St. Peter's, one in August in Redbourn, one in October in Wheathampstead, and one in November in Redbourn, all infants under one year of age.

Let me urge you once more to include Measles and Whooping Cough in the list of Diseases notifiable under the Infectious Diseases (Notification) Act, and so do something to save the lives of these poor little ones so many of whom are cruelly cut off on the very threshold of life.

I should be very much obliged if my professional brethren in the District would send me the notifications as soon as their diagnosis is made, and it would also be a

great assistance to me if they would kindly put in the ages of the patients.

There was a certain amount of Influenza during the year but at no time did it prevail as an epidemic, and no deaths are attributed to this cause.

There has been a good deal of trouble lately about the Redbourn sewage. In consequence of complaints that were made about the sewage reaching the river in a very imperfectly purified condition, a filtering bed was prepared, but owing to the absence of fall the result was anything but satisfactory. I am strongly of opinion that it will be necessary to raise the sewage to a higher level by means of pumping, in order to allow a sufficient fall for it to purify itself by filtration through a sufficient depth of soil.

I have reported several times on the insanitary condition of Wheathampstead, and on the danger to public health arising from the condition of the sewers, but up to this year nothing satisfactory has been done. Owing to the outbreak of Enteric Fever there, a number of insanitary premises have been inspected and reported upon. I am glad to say that the defects complained of either have been remedied or will be attended to very shortly. The principal sewer in the village, I am pleased to say, will be relaid of greater calibre and having a greater fall, so that matter will not be likely to lodge there and cause an obstruction. Provision has also been made for the ventilation and flushing of the sewers. All this, of course, will entail a certain outlay, but I feel confident that the improved health of the community will far more than compensate the Wheathampstead people for any expense which may be incurred.

During the year I have made various Sanitary Inspections in different parts of the district, especially in Harpenden, Wheathampstead, Redbourn, Sandridge, Colney Heath, London Colney, Tyttenhanger Green, Roestock, Hatfield Road, etc., etc., and made various recommendations, which in most cases have been carried out.

I have visited nearly every part of the district during the year, but found nothing except what is mentioned above to call for special comment.

I have, during the year, visited most of the Slaughter-houses, and found everything in a tolerably satisfactory condition.

I have visited nearly all the Bakehouses throughout the District, and have found everything satisfactory.

I have analysed 24 samples of water with the following result :— 10 were good, 4 suspicious, and 10 bad.

In conclusion I beg to thank the Chairman and Members of the District Council for the courtesy and consideration which they have shown me. My thanks are also due to the Inspector of Nuisances for his valuable assistance.

I am, Gentlemen,

Your most obedient Servant,

JOHN MORISON, M.D., D.P.H.

Medical Officer of Health.



ST. ALBANS RURAL DISTRICT COUNCIL.

Report of Inspector of Nuisances for the Year ending Dec. 31st, 1896.

PARISH.	Privies cleansed and repaired.	New privies built.	New w.c.'s built.	Earth closets constructed.	Cesspools cleansed.	Drains cleansed and repaired.	House refuse and ashes removed.	Foul ditches cleansed.	Over-crowding abated—No. of cottages.	Cottages cleansed and disinfected.	Cottages closed.	Pigsties cleansed and repaired.	Manure removed.	Yards cleansed.	Bakehouses cleansed.	Slaughterhouses cleansed.	Wells repaired and cleansed.	Cesspools constructed.	Drains connected with sewer.	W.c.'s connected with sewer.	Water supplied—No. of houses.	Water analysed.	Sewage tanks and catchpits cleansed.	New wells constructed.	TOTALS.
ST. PETER (Part of)	51	3	10	..	6	2	20	10	..	5	..	2	10	12	4	4	2	8	..	..	10	2	8	..	169
ST. STEPHEN ,, ...	60	4	..	..	9	16	22	..	..	6	..	..	5	9	5	2	1	..	..	..	..	2	..	3	144
ST. MICHAEL ,, ...	30	1	..	..	2	2	10	..	..	1	..	1	1	3	..	..	..	4	..	..	5	..	..	..	60
SANDRIDGE ,, ...	34	1	4	..	4	6	10	4	..	19	..	..	2	10	2	..	..	..	..	..	..	..	16	..	113
WHEATHAMPSTEAD	45	4	4	4	4	3	20	..	..	48	..	3	5	8	5	3	..	8	3	3	..	8	20	5	203
HARPENDEN	119	7	30	12	40	21	100	1	..	30	..	4	10	14	9	5	4	20	..	..	33	16	..	4	479
REDBOURN	88	1	..	..	8	8	51	..	1	..	..	1	3	2	7	3	..	..	..	..	..	2	5	..	180
TOTALS	427	21	48	16	73	58	233	15	1	109	..	11	36	58	32	18	7	40	3	3	48	30	49	12	1348



R E P O R T
 OF THE
MEDICAL SUPERINTENDENT
 OF THE
SISTERS' HOSPITAL,
For the year 1896.

GENTLEMEN,

During the year 1896, 146 patients, all suffering from scarlet fever, were admitted into the Sisters' Hospital, making, together with 9 patients remaining in the hospital at the commencement of the year, a total of 155 persons treated. Of these patients, 3 were members of the Hospital Staff, 83 were urban cases, 3 were paupers, and 57 were from the rural district. Most of the patients were children, and the majority children of tender years. Over the age of 15 we had only 15 persons, while there were 32 under 5 years of age. During the year 112 persons were discharged, and there were 43 patients remaining under treatment at the close of the year. There were 3 deaths, that is to say roughly speaking about 2 per cent. of the patients treated.

On January 15th, Mr. and Mrs. Willy entered upon their duties as porter and cook, and I am pleased to state that I am very well satisfied with the way in which they have performed the important duties entrusted to them.

Mrs. Haly was appointed matron on January 29th, and on February 19th she entered upon her duties. Ever since that time her work has been always most arduous, and at times very difficult and trying. She has had a great many patients to look after, being a great part of the time without any skilled assistance, and for the last two months has only had one nurse to assist her in looking after on an

average 40 patients. She has during that time hardly ever left the precincts of the Hospital, and has worked day and night, not sparing herself in her anxiety that the patients should be properly attended to. She has also managed the Hospital in a most economical and efficient manner.

In April, the Committee thought it desirable to erect two partitions with doors in the corridor of the Hospital, in order to divide the building into three separate parts, with the view of being able to isolate Scarlet Fever and Diphtheria from each other, or from any other Infectious Disease which might be admitted.

Early last summer it was found that the Disinfector (a hot air chamber) was out of repair and useless. Ever since that time we have been without any disinfecting apparatus. I would earnestly urge the Committee to lose no more time in providing a Washington Lyons or other Steam Disinfector, in the interests of true economy, as well as efficiency.

In the end of the year, owing to the great increase of work, and in order to be able to look after the patients in a more satisfactory manner, it was decided to engage the services of a permanent Charge Nurse, and a Probationer.

It is a great pity that the Small-pox Hospital had to be erected so near the main building. I cannot but think that the admission of patients there might be attended with some considerable risk to patients in the Hospital suffering from other diseases, and I can only hope that it will not be long before the Committee can see their way to provide a separate Hospital for Small-pox, or at any rate a block removed a considerable distance from the other buildings.

I am, Gentlemen,

Your most obedient Servant,

JOHN MORISON, M.D., D.P.H.,

Medical Superintendent.